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TO: Daron Haddock, Permit Supervisor

FROM: Paul Baker, Reclamation Biologist

DATE: February 27, 1992

RE: Conveyor Permit Revision Deficiency Review, Utah Fuel Company, Skyline Mine, ACT/007/005-91-1, Folder #2, Carbon County, Utah

SUMMARY

Utah Fuel Company has proposed constructing a conveyor for transporting coal from the Skyline Mine to the train loadout at the mouth of Eccles Canyon. Final and contemporaneous revegetation is proposed to be as in the current plan. The primary concern is the effect on big game which is only partially addressed in the plan.

ANALYSIS

R645-301-320 **Environmental Description**

Proposal:

There are no unique vegetative types that would be disturbed by the construction of the conveyor. The revision says that most of the vegetation is a sagebrush-snowberry community, but other vegetative types described in more detail in other parts of the plan are also present, including previously disturbed areas. Eccles Canyon is vegetated by similar pant communities as described for the lease area, but Gambel oak, curlleaf mountain mahogany, and blue spruce are components of the vegetation. Gambel oak and curlleaf mountain mahogany occur as minor stands in the south facing slopes of the canyon, and blue spruce is in the alluvial terraces at the mouth of Eccles Creek. Eccles Canyon species are included in the Endangered Plant Studies report dated September 1979 and amended February 1980 Table I except for the Gambel oak and curlleaf mountain mahogany which are present as minor components in the canyon.

About half of the route will be on an existing bench that has varying degrees of vegetative cover becoming reestablished. The plan includes maps of the vegetative

communities along the length of the conveyor.

The revision does not present new wildlife information, but existing parts of the plan contain results of wildlife studies that have been performed in the past, including deer migration studies in Eccles Canyon. These studies identified eleven deer trails. Three of these were well-used, and the others had one or fewer deer passages every two days. Other big game and domestic sheep also used these trails.

Analysis:

The vegetation map of the conveyor route shows four vegetative types which are not described in more than general terms in the plan: spruce, Gambel oak, aspen-Gambel Oak, and sagebrush-Gambel oak-snowberry. The revision should reaffirm that no species not included in species lists in other parts of the plan are present in the areas to be disturbed other than Gambel oak and curlleaf mountain mahogany. Species in these communities are not likely to differ much, if at all, from what is described in the plan; however, the revision needs to document this.

The areas to be disturbed need to be correlated to the reference area that will be used for judging success of final reclamation. This does not have to be a species by species comparison but should at least show similarity of cover, diversity, density, and productivity by life forms.

Deficiencies:

The revision must show similarity between areas to be disturbed on the conveyor route and the reference area standard which will be used for final reclamation. The revision must also document that species present in the communities on the conveyor route are described in other parts of the plan.

R645-301-330 Operation Plan

Proposal:

The cover letter accompanying this revision states that Utah Fuel has had several reviews with the Division of Wildlife Resources (DWR), and page 2-101 says that the detailed plan of the conveyor showing big game crossings has been designed ad approved by DWR. The entire length of the conveyor is located on bent towers sufficiently high to allow deer to cross under it, and the conveyor is elevated at sites preselected with DWR to allow movement of elk under it. The text also states that the design and location of big game crossings is shown on maps 3.2.3-3a through

3.2.3-3h. Maps 3.2.3-3a through 3.2.3-3h only show locations of big game crossings; they do not show designs.

The proposal mentions the potential problem of noise interfering with elk but does not elaborate.

The belt system will be totally enclosed in a gallery where it crosses over Highway 264.

No deviation from the current plan for contemporaneous revegetation is proposed for any of the areas to be disturbed or redisturbed. The cross reference under R645-301-352 Contemporaneous Reclamation refers to section 4.4 of the plan which refers to section 4.7 of the plan which discusses final revegetation. One must infer that the same seed and planting mixes and other methods will be used for contemporaneous reclamation as in final.

Analysis:

Ken Phippen of DWR stated that Utah Fuel has discussed the conveyor proposal with him and that he generally concurred in the design that was presented although he had not seen the revision proposal. The plan shown in the revision, however, does not show enough detail of the big game crossings to determine its adequacy. The plan states, for example, that maps 3.2.3-3a through 3.2.3-3h show designs of big game crossings, but these maps only show the locations. These locations are generally in draws, but the plan gives no indication of the height above ground of the conveyor.

Deer trail locations as documented in Volume A-2 are generally in locations where conveyor wildlife crossings are planned. Where crossings are not planned to be at the same locations as trails, the crossings are generally a fairly short distance away. Even parts of the conveyor that are not classified as wildlife crossings may allow passage if they are high enough. Deer have been shown to cross under conveyors without much difficulty where they are at least 50 cm (about 20 inches) above the ground, snow, or vegetation. This does not include bucks with large antlers.

Literature studies of big game crossings at conveyors do not indicate problems with noise. Any information that the Applicant has available on noise levels of this conveyor system, however, should be presented as it may apply both to wildlife and to recreational use of the canyon.

While the conveyor belt essentially becomes a tube between the mine site and the loadout, there is a apparently a potential for some coal to spill since the Applicant has proposed to enclose the belt in a gallery above the state highway. Eccles Creek is a class III fishery but is important for spawning fish from Scofield Reservoir, and it also needs to be protected as much as possible.

The MRP should specifically discuss the plan for contemporaneous reclamation, even if this is just a statement in the text to refer to the final reclamation plan, rather

than having one infer through the cross reference what the plan is. Some aspects of the revegetation plan will be discussed in the permit renewal technical deficiency review, but some are discussed here.

There are some inconsistencies and gaps in the seeding and mulching plans that need to be corrected. South-facing slopes of 1h:3v or less will have seed broadcast with a cyclone spreader, and south-facing slopes of 2h:1v or less will be hydroseeded. The slopes for these two methods overlap.

In other areas with slopes of greater than 1.5h:1v, no topsoil will be used except in basins where handset transplants will be placed. Hydromulch seeding will be done in the interspaces. This may be meant to say that the interspaces will be hydroseeded, but it implies that mulch may be mixed with the seed which must not be done.

No mulching method is shown for slopes less than 10h:1v. Slopes 10h:1v to 3h:1v will be mulched with straw or other inert materials. Slopes greater than 3h:1v will be hydromulched.

Deficiencies:

1. The plan must show detail of the designs of the big game crossings and of the elevation of other areas of the conveyor system.

2. Utah Fuel must present any available information on anticipated noise levels from the conveyor.

3. The conveyor must be fully enclosed above the Eccles Creek stream buffer zone.

4. The text of the plan must specifically refer to the plan for contemporaneous reclamation.

5. Seeding and mulching plans must be corrected so that different methods are not proposed for the same area and so that methods are proposed for all areas.

R645-301-340 Reclamation Plan

Proposal:

Final reclamation will be according to plans presented in Chapter 4 of the MRP. The conveyor bench will be reclaimed according to the special plan that was

concerning the proposed postmining land use by the legal or equitable owner of record of the surface of the proposed permit area and Utah and local government agencies which would have to initiate, authorize, implement, or approve the proposed use of the land following reclamation. The application only contains comments from the owner of the waste rock disposal site; no other remarks are included in the plan.

Deficiencies:

> The application must include copies of comments concerning the proposed postmining land use by the legal or equitable owner of record of the surface of the proposed permit area and Utah and local government agencies which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation.

R645-301-420 **Air Quality**

Proposal:

No description of coordination with the Division of Air Quality is found in the revision proposal.

Analysis:

The application must provide a description of coordination efforts that have been undertaken with the Division of Air Quality, including a copy of the Notice of Intent.

Deficiencies:

> The application must provide a description of coordination efforts that have been undertaken with the Division of Air Quality, including a copy of the Notice of Intent.

RECOMMENDATIONS

Approval of this revision is not recommended until the deficiencies discussed above are resolved.